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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,626	08/09/2001	Charles A. Shaffer	05272.00001	3166
22907	7590	04/02/2004	EXAMINER	
BANNER & WITCOFF 1001 G STREET N W SUITE 1100 WASHINGTON, DC 20001			FISCHER, JUSTIN R	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,626

Applicant(s)

SHAFFER, CHARLES A.

Examiner

Justin R Fischer

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[Handwritten signature]

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20041117</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 3 and 8 is withdrawn in view of the newly discovered reference(s) to Ahmad (US 3,866,652). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staten (US 1,097,824, of record) and further in view of Ahmad (US 3,866,652, newly cited), Panaroni (US 5,254,405, of record), and Yunan (US 3,894,973, of record). Staten teaches a tire construction having a core substantially filled with a mixture of "core bits" (comminuted rubber) and a rubber adhesive solution. In this instance, said mixture is made into a preform via a molding operation and subsequently placed within the tire cavity- it is evident that this method does not require a valve to introduce the material since it is not provided to the tire cavity in liquid form. However, one of ordinary skill in the art at the time of the invention would have found it obvious to include said mixture in the tire cavity as a liquid versus a solid preform since such a method eliminates complicated processing associated with molding, in particular the need to

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have a variety of differently sized molds to accommodate the wide variety of tire sizes. For example, Ahmad discloses a similar tire structure in which a mixture of glass or ceramic particles and an adhesive material (urethane) is injected or pumped into a tire cavity via a valve (Column 3, Lines 45-65). Thus, at the time of the invention, the tire industry recognized the ability to transfer a particle-reinforced mixture into a tire cavity via a pump and valve assembly, such that the inclusion of a valve in the tire construction of Staten would have been obvious. As to the "adhesive material", Staten fails to expressly describe the adhesive material as "liquid virgin polyurethane". In any event, one of ordinary skill in the art at the time of the invention would have found it obvious to use polyurethanes as the specific adhesive material in Staten since it is extensively used as an adhesive or binder in the formation of tire components formed of chopped/comminuted tire particles, as shown for example by Panaroni (Column 1, Lines 14-51) and Yunan (Column 1, Lines 10-30, Column 2, Lines 50-59, and Column 3, Line 45). It is additionally noted that the adhesive/binder material of Ahmad is a polyurethane (Column 2, Lines 56+). Thus, polyurethanes represent an extremely well known adhesive or binder material (described as popular binder by Panaroni: Column 1, Line 40) that would have been readily appreciated in the tire construction of Staten.

As to claim 8, the process described by Ahmad involves pumping a particle-reinforced mixture into a tire and subsequently curing said mixture (Column 4, Lines 1-5).

Response to Arguments

4. The indicated allowability of claims 3 and 8 has been withdrawn in light of the newly cited reference(s) above. In particular, Ahmad provides evidence that it was known in the tire industry to pump a particle reinforced mixture into a tire cavity and subsequently cure said mixture. One of ordinary skill in the art at the time of the invention would have found it obvious to use this process in the tire of Staten since it would eliminate the complicated processing of forming a performing and would allow a single to process for a variety of tire sizes (different sized tires require multiple preforms whereas a liquid pumping process is suitable for any tire size as liquid simply fills volume of tire cavity).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Justin Fischer

March 22, 2004


JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300